



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3406 FAX (603) 271-7894



January 9, 2002

Letter of Deficiency
DAM #009.03

Mr. Fred Woodworth
Town of Antrim
P.O. Box 248
Antrim, NH 03440

RE: Gregg Lake Dam, Antrim

Dear Mr. Woodworth

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that plays a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on August 9, 2001. During this visual inspection and/or file review, the following deficiencies were observed:

- There was leakage detected within the seam between the principle concrete spillway and abutment walls on both sides of the spillway. Leakage was quite prominent with definite pressure forcing a stream of water at the right base corner section of the primary Ogee spillway and right concrete abutment. Leakage was also observed along the left Ogee spillway and left abutment in two locations within 12 inches of the base of the Ogee spillway. It should be noted that this was previously repaired and may need additional sealing;
2. There was small tree growth within ten feet of the downstream toe of the concrete spillway and within the downstream stone training walls and channel;
 3. There was a tree growing within 5 feet of the right upstream cutoff wall just behind the gatehouse;
 4. There was brush and small tree growth at the corner of the right concrete cutoff wall and earth abutment and adjacent to the emergency spillway;
 5. There was minor seepage with minor concrete deterioration at the right downstream abutment to the emergency spillway at the contact between the concrete and natural rock outcrop. It should be noted that the observed seepage could be from off site;
 6. There was significant leaking downstream of the low-level sluice gate (original water supply gate) that appears to be from the gatehouse; and
 7. The Emergency Action Plan is in need of the annual update and performance of the required annual test.

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DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

May 1, 2002:

- Remove the small tree growth within ten feet of the downstream toe of the concrete spillway and within the downstream stone training walls and channel;
2. Remove the tree growing within 5 feet of the right upstream cutoff wall just behind the associated gatehouse;
3. Remove the brush and small tree growth at the corner of the right concrete cutoff wall and earth abutment and adjacent to the emergency spillway downstream of the right cutoff wall;
4. Conduct the annual update and test of the EAP and update the flow chart;

December 1, 2002:

5. Investigate and repair the source of the significant leaking from the downstream low-level sluice gate (original water supply gate) that appears to be from the gatehouse. Additionally, prior to repairs, report to our office on your intent for repairs;

On a continuing basis:

6. Monitor the seepage, which was noted at the right toe of the dam at the base of the right abutment wall of the emergency spillway; and
7. Monitor and repair, as necessary, the leakage detected within the seam between the principle concrete spillway and abutment walls on both sides of the spillway. Additionally, during the next deep drawdown investigate the source of the leak and formulate a plan for repair as necessary.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

ENTERED 2/11/02 ✓

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If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

COPY

Dale F. Guinn, P.E.
Dam Safety Engineer
